



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,563	02/27/2002	Eiji Nagamura	04329.2743	5887

7590 05/20/2004  
Finnegan, Henderson, Farabow,  
Garrett & Dunner, L.L.P.  
1300 I Street, N.W.  
Washington, DC 20005-3315

EXAMINER

HIRL, JOSEPH P

ART UNIT	PAPER NUMBER
----------	--------------

2121

DATE MAILED: 05/20/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/083,563

Applicant(s)

NAGAMURA ET AL.

Examiner

Joseph P. Hirl

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-21 are pending in this application.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Sundaresan et al (U.S. Patent 6,651,058, referred to as **Sundaresan**).

### **Claims 1, 21**

Sundaresan anticipates access control means for conducting user authentication to the client terminal requesting for access for permitting knowledge analysis from the client terminal (**Sundaresan**, c 6, l 29-49; Fig. 1; Examiner's Note (EN): see Examiner's Considerations (EC) below; user authentication is synonymous with address identification (URL) and hypertext transfer protocol (http)); and knowledge analysis means for clustering knowledge accumulated in the knowledge

database to create cluster database in which each of the knowledge is classified into clusters defined based on category (**Sundaresan**, c 7, l 31-49); wherein the knowledge analysis means has means for setting important words having priority in clustering at creation of the cluster database, and carries out clustering to create an axis of cluster on the basis of the important words (**Sundaresan**, c 7, l 31-49; EN: an axis of cluster is synonymous with "a significant number of the relevant topic's instances belong to the target topic's cluster").

#### **Claim 2**

Sundaresan anticipates wherein the knowledge analysis means has means for setting unnecessary words to be ignored in clustering, and carries out clustering on the basis of the important words and the unnecessary words (**Sundaresan**, c 9, l 58-64; c 10, l 1-9).

#### **Claim 3**

Sundaresan anticipates the knowledge analysis means has means for setting synonymous words to be handled as identical words in clustering, and carries out clustering on the basis of the combination of the important words and the unnecessary words and the synonymous words (**Sundaresan**, c 8, l 47-62; c 9, l 58-64).

#### **Claim 4**

Sundaresan anticipates the knowledge analysis means has means for storing analysis conditions used at creation of the cluster database (**Sundaresan**, c 6, l 61-67; c 7, l 1-3; c 7, l 32-49).

**Claim 5**

Sundaresan anticipates the knowledge analysis means has means for reading the stored analysis conditions, and creating new cluster database by use of analysis conditions which are changed from the stored analysis conditions (**Sundaresan**, c 8, l 8-21).

**Claim 6**

Sundaresan anticipates the knowledge analysis means has means for creating cluster database from knowledge accumulated in the knowledge data on the basis of analysis conditions including important words, unnecessary words and synonymous words (**Sundaresan**, c 7, l 32-49; c 8, l 47-62; c 9, l 58-64); and re-analysis means for obtaining the analysis conditions, and carry out clustering once again by use of analysis conditions in which at least one or more of the important words, the unnecessary words and the synonymous words are reset to recreate cluster database and to replace the already-created cluster database (**Sundaresan**, c 8, l 47-62; c 9, l 58-64; c 10, l 1-20).

**Claim 7**

Sundaresan anticipates cluster setting means for prompting the client terminal to set clusters to be objectives of recreation among the clusters contained in the already created cluster database, and carrying out the reclustering on clusters set by the client terminal (**Sundaresan**, c 7, l 32-49; EN: a significant number of the relevant topic's instances belong to the target topic's cluster where the significance is determined by a user defined threshold or object).

**Claim 8**

Sundaresan anticipates the knowledge analysis means determines a hierarchical structure defining hierarchical relation of one knowledge piece and another knowledge piece among the knowledge, and also determines clusters to which the respective knowledge pieces belong (**Sundaresan**, c 10, l 10-20).

#### **Claim 9**

Sundaresan anticipates the knowledge analysis means prompts a user to input clustering conditions including at least one of analysis result name, analysis objective period, focusing keyword, number of focused cases, number of hierarchies of hierarchical structure defining hierarchical relation of one knowledge piece and another knowledge piece among the knowledge, presence or absence of redundancy of knowledge, and number of most significant clusters to carry out clustering on the basis of the input clustering conditions (**Sundaresan**, c 7, l 32-49; EN: a significant number of the relevant topic's instances belong to the target topic's cluster where the significance is determined by a user defined threshold or object; there are various thresholds in this Markush claim).

#### **Claim 10**

Sundaresan anticipates knowledge analysis means further comprises editing processing means for editing the already-created cluster database and making the client terminal display the edited cluster database (**Sundaresan**, c 8, l 8-21; Fig. 1), and the editing processing means prompts the client terminal to input editing conditions including at least one of presence or absence of cluster list display, presence or absence of time series display, presence or absence of hierarchical structure display,

and presence or absence of graph display (**Sundaresan**, c 3, l 34-40; Fig. 1; EN: Fig. 1 illustrates many client computers, all of which have graphical displays), and edits the client database on the basis of the editing conditions input by the client terminal, and makes the client terminal display editing processing results including at least one of cluster list display, time series display, hierarchical structure display, and graph display (**Sundaresan**, c 7, l 32-49; Fig. 1; EN: a significant number of the relevant topic's instances belong to the target topic's cluster where the significance is determined by a user defined threshold or object effecting an editing process; Fig. 1 illustrates many client computers, all of which have graphical displays).

#### **Claim 11**

Sundaresan anticipates conducting user authentication to client terminals requesting for access for permitting knowledge analysis from the client terminals (**Sundaresan**, c 6, l 29-49; Fig. 1; Examiner's Note (EN): see Examiner's Considerations (EC) below; user authentication is synonymous with address identification (URL) and hypertext transfer protocol (http)); and clustering knowledge accumulated in the knowledge database to create cluster database in which each of the knowledge is classified into clusters defined based on category (**Sundaresan**, c 7, l 31-49); wherein in the creation of the cluster database, important words having priority in clustering are set to create an axis of cluster on the basis of the important words (**Sundaresan**, c 7, l 31-49; EN: an axis of cluster is synonymous with "a significant number of the relevant topic's instances belong to the target topic's cluster").

#### **Claim 12**

Sundaresan anticipates in the creation of the cluster database, unnecessary words to be ignored in clustering are set, and the clustering is carried out on the basis of the important words and the unnecessary words (**Sundaresan**, c 9, l 58-64; c 10, l 1-9).

**Claim 13**

Sundaresan anticipates the creation of the cluster database, synonymous words to be handled as identical words in clustering are set, and the clustering is carried out on the basis of the combination of the important words, the unnecessary words and the synonymous words (**Sundaresan**, c 8, l 47-62; c 9, l 58-64; c 10, l 1-9).

**Claim 14**

Sundaresan anticipates storing analysis conditions used in the creation of the cluster database (**Sundaresan**, c 6, l 61-67; c 7, l 1-3; c 7, l 32-49).

**Claim 15**

Sundaresan anticipates at creation of the cluster database, creating the cluster database from knowledge accumulated in the knowledge data on the basis of analysis conditions including important words, unnecessary words and synonymous words (**Sundaresan**, c 7, l 32-49; c 8, l 47-62; c 9, l 58-64); and obtaining the analysis conditions, and carrying out clustering once again by use of analysis conditions in which at least one or more of the important words and the unnecessary words and the synonymous words are reset to recreate cluster database and to replace the already-created cluster database (**Sundaresan**, c 8, l 47-62; c 9, l 58-64; c 10, l 1-20).

**Claim 16**



Sundaresan anticipates a hierarchical structure defining hierarchical relation of one knowledge piece and other knowledge piece among the knowledge is determined, and clusters to which the respective knowledge pieces belong are determined (Sundaresan, c 10, l 1-37; EN: new candidates are related to the relevance model and then to the target topic (cluster)).

#### **Claim 17**

Sundaresan anticipates prompting the client terminal to input editing conditions including at least one of presence or absence of cluster list display, presence or absence of time series display, presence or absence of hierarchical structure display, and presence or absence of graph display (Sundaresan, c 3, l 34-40; Fig. 1; EN: Fig. 1 illustrates many client computers, all of which have graphical displays for viewing and decision entry); editing the already-created client database on the basis of the editing conditions input by the client terminal to make the client terminal display editing processing results including at least one of cluster list display, time series display, hierarchical structure display, and graph display (Sundaresan, c 7, l 32-49; Fig. 1; EN: a significant number of the relevant topic's instances belong to the target topic's cluster where the significance is determined by a user defined threshold or object effecting an editing process; Fig. 1 illustrates many client computers, all of which have graphical displays).

#### **Claim 18**

Sundaresan anticipates a recording medium (Sundaresan, c 6, l 29-41; Fig. 1); a first program code which is recorded in the recording medium to assign the computer

system a command to carry out user authentication to client terminals asking for access for permitting knowledge analysis from client terminals (**Sundaresan**, c 6, l 29-49; Fig. 1; EN: see EC below; user authentication is synonymous with address identification (URL) and hypertext transfer protocol (http); program code is the mechanism under which a computer operates); a second program code which is recorded in the recording medium to assign the computer system a command to create cluster database used for knowledge analysis from each of client terminals whose access is permitted, for classifying each of knowledge accumulated in the knowledge database into clusters defined based on category (**Sundaresan**, c 7, l 31-49); and a third program code which is recorded in the recording medium to assign the computer system a command to carry out analysis condition setting procedures to set important words having priority in clustering, unnecessary words to be ignored in clustering, and synonym: to be handled as synonymous words in clustering, at creation of the cluster database (**Sundaresan**, c 7, l 32-49; c 8, l 47-62; c 9, l 58-64).

#### **Claim 19**

Sundaresan anticipates a fourth program code which is recorded in the recording medium to assign the computer system a command to carry out analysis condition saving procedures to save the analysis conditions used at creation of the cluster database (**Sundaresan**, c 6, l 61-67; c 7, l 1-3).

#### **Claim 20**

Sundaresan anticipates a fifth program code which is recorded in the recording medium to assign the computer system a command to create cluster databases from

knowledge accumulated in the knowledge data on the basis of analysis conditions of important words and unnecessary words and synonymous words (**Sundaresan**, c 7, l 32-49; c 8, l 47-62; c 9, l 58-64), and a sixth program code which is recorded in the recording medium to assign the computer system a command to obtain the analysis conditions used at creation of the cluster database and to re-create cluster database by use of analysis conditions after at least one or more of the important words and the unnecessary words and the synonymous words are reset and replace the already-created cluster database (**Sundaresan**, c 8, l 47-62; c 9, l 58-64; c 10, l 1-20).

#### ***Examination Considerations***

4. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

5. Examiner's Notes are provided in an effort to assist the applicant to better understand the nature of the prior art application and, as appropriate, to further indicate other prior art that maybe applied in other office actions. The Examiner's Notes, unless otherwise stated, are not prior art but a link to prior art that one of ordinary skill in the art would find appropriate.

6. Examiner's Opinion:

Para 4 above applies. The Examiner has full latitude to interpret each claim in the broadest reasonable sense. To one of ordinary skill in the art, program code is the way a computer is made to operate.

### ***Conclusion***

7. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

- Iliff, U.S. Pub. 2001/0029322
- Dempski et al, U.S. 6,727,927
- Swaminathan et al, U.S. 6,721,726

8. Claims 1-21 are rejected.

### Correspondence Information

Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anthony Knight can be reached at (703) 308-3179.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:


(703) 746-7290 (for informal or draft communications with notation of "Proposed" or "Draft" for the desk of the Examiner).

Hand-delivered responses should be brought to:

Receptionist, Crystal Park II

2121 Crystal Drive,

Arlington, Virginia.

  
Joseph P. Hirl

May 11, 2004